



BAKER COLLEGE
STUDENT LEARNING OUTCOMES

CIS 2610 Visual Basic
3 Semester Hours

Student Learning Outcomes & Enabling Objectives

1. Demonstrate an understanding of the Visual Basic programming language.
 - a. Explore the background of Visual Basic.
 - b. Explore the characteristics and different editions of Visual Basic.
2. Exhibit the ability to create well-designed and documented application solutions using an organized methodology and standardized naming conventions.
 - a. Use an organized methodology to create a well-designed and documented application.
 - b. Use a standardized naming convention when creating a well-designed and documented application.
3. Create solutions that deal with:
 - a. Use common controls and properties.
 - b. Use numeric data types and variables.
 - c. Use validating input strings, functions, and methods.
 - d. Use arithmetic operations, Boolean operations, string operations with variables and constants.
 - e. Use Decision-making concepts, using If-Then-Else and Select Case statements.
 - f. Use the concept of converting between different data types.
 - g. Use Try/Catch blocks for error handling.
 - h. Display message boxes with error messages.
 - i. Format data for display.
4. Exhibit the ability to:
 - a. Create menus and submenus for program control.
 - b. Display and use the Windows common dialog boxes.
 - c. Write reusable code in sub and/or function procedures and call them from other locations.
5. Exhibit the ability to:
 - a. Use templates to create splash screens and about boxes.
 - b. Use the Show, ShowDialog, and Hide methods to display and hide forms.
 - c. Handle form events.
 - d. Share variables between forms.
6. Exhibit the ability to:
 - a. Create list boxes and combo boxes.
 - b. Add and remove items in a list at run time.

- c. Display a selected item from a list.
 - d. Use repetitions including Do loops and For/Next statements to iterate through code.
 - e. Utilize arrays for storing information.
 - f. Build programs that process sequential files – both input and output
7. Demonstrate the ability to work individually and/or with a team.
 - a. Design a Visual Basic program.
 - b. Document a Visual Basic program.
 - c. Test a Visual Basic Program.
 - d. Implement a Visual Basic program.
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Big Ideas and Essential Questions

Big Ideas

- Core principles of programming
- Problem solving and program development using the Visual Basic language
- How to build GUI-based applications

Essential Questions

1. How do programmers solve problems?
 2. What is the Visual Basic programming environment?
 3. Why do programmers use the Visual Basic programming language?
 4. What are the elements of the Visual Basic programming language?
 5. What facilities does Visual Basic provide to support the development of GUI-based applications?
 6. After solving a problem, how do programmers implement the solution as a GUI-based application?
 7. How do programmers utilize procedural code within Visual Basic programs?
 8. How do programmers utilize event-handling to support interactive programs?
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These SLOs are approved for experiential credit.

Effective: Fall 2017